

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A process for the treatment of water contaminated by apolar organic compounds and/or heavy metals which consists in circulating water through a system comprising at least two types of zeolites having a silica/alumina ratio > 50 , placed in succession, wherein the first zeolite through which the water is passed is characterized by a high ~~absorption~~ adsorption capacity and structural channel dimensions ranging from 7 to 50 Å, whereas the second is characterized by a high removal capacity of molecules with a molecular diameter comparable with structural channel dimensions ranging from 5 to 7 Å.

Claim 2 (Original): The process according to claim 1, wherein the zeolites are in the form of formulates with ligands selected from alumina, silica, clay.

Claim 3 (Original): The process according to claim 2, wherein the ligands form from 20 to 60% by weight of the formulate.

Claim 4 (Original): The process according to claim 1, wherein the zeolites have a silica/alumina ratio > 200 .

Claim 5 (Original): The process according to claim 1, wherein the zeolite characterized by structural channels having dimensions of 7-50 Å, is selected from the group consisting of Y Zeolite, beta zeolite, MSA, ERS-8 and MCM-41.

Claim 6 (Original): The process according to claim 5, wherein the zeolite characterized by structural channels having dimensions of 7-50 Å, is Y Zeolite.

Claim 7 (Currently Amended): The process according to claim 1, wherein the zeolite characterized by structural channels having dimensions of 5-7 Å, is selected from the group consisting of silicalite, ZSM-5 zeolite, ~~Mordenite~~ and mordenite.

Claim 8 (Original): The process according to claim 7, wherein the zeolite characterized by structural channels having dimensions of 5-7 Å, is ZSM-5.

Claim 9 (Original): The process according to claim 1, wherein the water is contaminated by at least one of the apolar organic compounds selected from the group consisting of styrene, p-xylene, benzo-anthracene, benzo-pyrene, benzo-fluoroanthene, benzo-perylene, chrysene, pyrene; halogenated solvents such as carbon tetrachloride, tetrachloro-ethylene, trichloro-ethylene, 1,2-cis-dichloro-ethylene, 1,2-trans-dichloro-ethylene, 1,1-dichloro-ethane, 1,2-dichloro-ethane, hexachloro-ethane, hexachloro-butadiene, vinyl chloride, chloro-methane, trichloro methane, 1,1-dichloroethylene, 1,2-dichloropropane, 1,1,2-trichloro-ethane, 1,2,3-trichloropropane, 1,1,2,2-tetrachloro-ethane, mono-chlorobenzene, 1,2-dichlorobenzene, 1,4-dichloro-benzene, 1,2,4-trichlorobenzene, 1,2,4,5-tetrachloro-benzene, pentachlorobenzene, hexachlorobenzene, 2-chlorophenol, 2,4-dichlorophenol, 2,4,6-tri-chlorophenol, pentachlorophenol, methyl tert-butylether (MTBE), ethyl-tert-butylether, tert-amyl-methyl-ether, BTEX (benzene, toluene, ethyl benzene, xylenes), styrene, naphthalene, 2-methyl-naphthalene, acenaphthene, phenanthrene.

Claim 10 (Currently Amended): The process according to claim 1, wherein the water is contaminated by at least one of the heavy metals selected from the group consisting of ~~Arsenie~~ arsenic, hexavalent ~~Chromium~~ chromium, ~~Antimonium~~ antimony, ~~Selenium~~

selenium, ~~Mercury~~ mercury, ~~Cadmium~~ cadmium, ~~Cobalt~~ cobalt, ~~Nickel~~ nickel, ~~Lead~~ lead,
~~Manganese~~ manganese and ~~Copper~~ copper.

Claim 11 (Original): The process according to claim 1, wherein the water is circulated through a system comprising Y Zeolite as first zeolite and ZSM-5 as second zeolite.

Claim 12 (Original): The process according to claim 1, wherein the apolar organic compounds are present at concentrations ranging from 5 to 2000 ppm.

Claim 13 (Original): The process according to claim 12, wherein the apolar organic compounds are present at concentrations ranging from 30 to 100 ppm.

Claim 14 (Original): The process according to claim 1, wherein the heavy metals are present at concentrations ranging from 0.01 to 20 ppm.

Claim 15 (Original): The process according to claim 14, wherein the heavy metals are present at concentrations ranging from 0.1 to 5 ppm.

Claim 16 (Original): The process according to claim 1, wherein the water is contaminated by aliphatic, halogen-aliphatic and mono-aromatic molecules and is circulated through a system comprising ZSM-5 zeolite as second zeolite.

Claim 17 (Currently Amended): The process according to claim 1, wherein the water is contaminated by aromatic molecules with two or more aromatic rings, alkyl-substituted

halogen, MTBE, and is circulated through a system comprising ~~Mordenite~~ mordenite as second zeolite.

Claim 18 (Currently Amended): The process according to claim 1, wherein the water is contaminated by mixtures of hydrocarbons and MTBE and is circulated through a system comprising Y Zeolite, ZSM-5 zeolite and ~~Mordenite~~ mordenite, placed in succession, wherein the first zeolite through which the water is passed is Y Zeolite.

Claim 19 (Original): The process according to claim 1, wherein the treatment is effected on contaminated groundwater and the water is circulated through a permeable reactive barrier (PRB), situated in situ perpendicular to the groundwater flow, whose reactive medium consists of the system comprising at least two types of zeolites.

Claim 20 (Canceled).